



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/712,610

11/13/2003

Berndt Pilgram

L&L-10226

9014

24131

7590

11/21/2006

LERNER GREENBERG STEMER LLP

P O BOX 2480

HOLLYWOOD, FL 33022-2480

EXAMINER

MAI, TAN V

ART UNIT

PAPER NUMBER

2193

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,610

Applicant(s)

PILGRAM, BERNDT

Examiner

Tan V. Mai

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,6,7,10-15,17,19-22,24,25 and 27-29 is/are rejected.  
7) ☒ Claim(s) 3,4,7-9,16,18,23 and 26 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/13/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method for performing a mathematical function.

"[t]o satisfy section 101 requirements, the claim must be for a practical application of the Sec. 101 judicial exception, which can be identified in various ways:

- . The claimed invention "transforms" an article or physical object to a different state or thing.
- . The claimed invention otherwise produces a useful, concrete and tangible result,...".

See "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" OG Date: 22 November 2005.

Since there is no physical transform to establish a practical application, a useful, concrete and tangible result appears to be lacking. Therefore, claims 21-29 are directed to a non-statutory process.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 6-7, 10-15, 17, 19-20, 21-22, 24-25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeb et al (Applicant's admission Prior Art, Ref. A or Ref. L) in view of Gandhi et al.

As per independent claim 1, Leeb et al disclose all the claimed feature except the claimed "filter block"; however, the feature is old and well known in the filter art, i.e., cascaded filter blocks. For example, Gandhi et al disclose a filter having a plurality of cascaded filter blocks, e.g., see Fig. 6, filter block (41) and filter block (42) coupled to a recursive filter block. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Gandhi et al "cascaded filter blocks" in Leeb et al, thereby making the claimed invention, because the proposed device is a filter having cascaded filter blocks as claimed.

As per dependent claims 2, 6-7 and 10-13, the detail features are well known in the art.

As per dependent claims 14-15, 17 and 19-20, the detail "analog" features are obvious to a person having ordinary skill in the art to implement the filter in either digital or analog compents.

Due to the similarity of method claim 21-22,24-25 and 27-29 to apparatus claims 1-2,6-7,10-15,17,19-20 22, they are rejected under a similar rationale.

4. Claims 1-2, 6-7,10-15,17,19-20, 21-22, 24-25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeb et al (Applicant's admission Prior Art, Ref. A or Ref. L) in view of Debuissier.

As per independent claim 1, Leeb et al disclose all the claimed feature except the claimed "filter block"; however, the feature is old and well known in the filter art, i.e., cascaded filter blocks. For example, Debuissier discloses a filter having a plurality of

Art Unit: 2193

cascaded filter blocks, e.g., see Fig. 2 and 10-14, filter block "F" coupled to a FIR filter block. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Gandhi et al "cascaded filter blocks" in Debuissier, thereby making the claimed invention, because the proposed device is a filter having cascaded filter blocks as claimed.

As per dependent claims 2, 6-7 and 10-13, the detail features are well known in the art.

As per dependent claims 14-15, 17 and 19-20, the detail "analog" features are obvious to a person having ordinary skill in the art to implement the filter in either digital or analog compents.

Due to the similarity of method claim 21-22,24-25 and 27-29 to apparatus claims 1-2,6-7,10-15,17,19-20 22, they are rejected under a similar rationale.

5. Claims 3, 4, 7-9,16,18, 23 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

Art Unit: 2193

7. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest the detail features as recited in dependent claims 3, 4, 7-9, 16, 18, 23 and 26.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai  
Primary Examiner